Perceptions of Rural and Metropolitan Physicians About Rural Practice and the Rural Community, Missouri, 1975

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PHYSICIAN TO POPULATION RATIOS in rural areas are low compared to those in urban areas (*1,2*). Since the distribution of physicians reflects the free choice of entrepreneurs in the marketplace, the current distribution of physicians is prima facie evidence of greater perceived or actual opportunities, or both, in urban areas. Some published reports indicate that rural areas represent a medical wasteland which physicians prefer to avoid because of lack of facilities, auxiliary support personnel, and colleagues, as well as excessive demands of patients (*3–5*); others indicate that rural areas are also a cultural wasteland—lacking adequate schools, other service institutions, and social-cultural amenities (*6–8*). Roemer (*9*) agrees that the lack of facilities and the unavailability of consultants contribute to the physician shortage. However, he does not agree that the problem is the "cultural disadvantages" of rural society; rather, he emphasizes the "human satisfactions associated with rural life."

In 1975, we interviewed physicians in a 20-county rural area of Missouri and in a metropolitan center, Kansas City. In the process, we explored some of their perceptions about rural practice and rural life. Their responses led us to question the assumption that rural areas represent a medical or cultural wasteland for those practicing there.

The area consists of two sets of contiguous counties —one north and the other south of the Missouri River. The largest place has a population of just under 10,000, and 10 places have populations of 2,500 or more. Although four counties border standard metropolitan statistical areas, they have remained rural in character. The area has been described in more detail previously (*10*).

The Study

Samples. All but two of the rural physicians in private practice were interviewed, most in their offices and the remainder at hospitals and homes. Medical doctors (MDs) and osteopaths (DOs) were quite evenly represented—63 MDs and 58 DOs (2 not interviewed). Because MDs and DOs in the area might have differ-

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ent perceptions of rural practice and the rural community, their responses were analyzed separately. Some of the data were broken down by age groups of the physicians, not only to control for the effects of age but also to observe the differences between younger and older physicians. Such differences may be important in location of practice behavior because younger physicians are more likely to change locations.

The metropolitan samples provided comparison groups for the rural physicians. Two metropolitan samples were selected: (*a*) 52 primary care physicians (general practitioners, family practitioners, general internists, pediatricians, obstetricians-gynecologists) and (*b*) 44 other specialists. Because almost all rural physicians are in primary care, they are most comparable to the metropolitan primary care physicians; however, because of their prestige, the perceptions of other metropolitan specialists were also thought to be important. In each metropolitan sample, selection was made randomly by means of an age stratification based on the age structure of rural physicians. In the following discussion, the four categories of physicians are referred to as R MDs, rural medical doctors; R DOs, rural osteopaths; M Prs, metropolitan primary care physicians; and M Sps, metropolitan specialists.

Characteristics of rural physicians. As noted earlier, the numbers of medical doctors and osteopaths were almost even. Only four women (three MDs and one DO) were practicing in the area. There were no black physicians. Almost one-fourth of the MDs and approximately one-eighth of the DOs were 65 years and over. Almost all (92 percent) of the rural physicians were practicing full time; the remainder were practicing part time because of age or poor health, or both. The majority of the rural physicians were in general or family practice; only five of the MDs (8 percent) and two of the DOs (3 percent) stated that they devoted full time to a different specialty.

Solo practice was the modal form in the 20 counties; only 33 percent of the MDs and 22 percent of the DOs were in groups or partnerships. Among the physicians under 45 years old, however, 58 percent of the MDs and 44 percent of the DOs were in group or partnership practices. Most of the rural physicians had hospital staff affiliations (87 percent of the MDs and 77 percent of the DOs) and, with one exception, all physicians under 55 years old were on hospital staffs.

The rural physicians were not likely to be professionally isolated; most of them had had contact with other physicians at least several times a week, and about 90 percent reported they made referrals to other physicians at least weekly. Thus, the general picture of physicians in the 20 counties is that they were not entirely isolated from colleagues or from practice facilities.

Pertinent to an understanding of the physicians' perceptions of their practice locations is that a considerable number of rural physicians were reared in rural areas whereas most metropolitan physicians were reared in urban areas. These relationships are the subject of an analysis in process, but they can be summarized briefly as follows: at the time of graduation from high school, the percentage of each type of practitioner living in a place having less than 2,500 population was R MDs, 66 percent; R DOs, 54 percent; M Prs, 16 percent; and M Sps, 19 percent.

Physicians' perceptions of their work situations. The physicians were asked to respond to the question, "How satisfied are you with your present work situation?" The response categories were "very satisfied," "satisfied," "neutral," "dissatisfied," and "very dissatisfied." Seventy-five percent or more of each type of physician reported being very satisfied or satisfied; the lowest proportion in these categories was for R MDs (75 percent) and the highest for M Prs (94 percent). Furthermore, the metropolitan physicians were somewhat more likely to report being very satisfied rather than satisfied. If not very satisfied or satisfied with their work situations, most of the remaining physicians reported a neutral position; only 7 of 209 physicians reported dissatisfaction or great dissatisfaction. Younger physicians were somewhat more likely than older ones to express neutrality or dissatisfaction with the work situation. Among R MDs under 55 years, 32 percent reported being neutral or less than satisfied (table 1).

Sources of satisfaction. For rural physicians, the advantage most often cited pertained to the quality of physician-patient relationships. As shown in table 2, patient-centered sources of satisfaction were reported by 52 percent of the R DOs and 43 percent of the R MDs. Among the metropolitan physicians, M Prs were also quite likely to report patient-centered advantages of their practices (39 percent), but this kind of advantage was perceived by a smaller percentage of M Sps (20 percent). On the other hand, M Sps were more likely than other physicians to report satisfaction with the technical aspects of medicine, that is, curing and healing. This satisfaction was reported by 49 percent of the M Sps, 22 percent of the M Prs, 27 percent of the R DOs, and 13 percent of the R MDs. In addition, 21 percent of the M Sps and 18 percent of the M Prs, compared with 9 percent of the

R DOs and 12 percent of the R MDs, indicated that the challenge of medicine and interesting cases were advantages in their work situations. Almost equal proportions of R MDs (15 percent) and R DOs (14 percent) cited the autonomy or independence of their practices as an advantage, but only a few metropolitan physicians cited this advantage (6 percent M Prs, 2 percent M Sps).

In spite of the reputation of rural areas for deficiencies in health facilities, 18 percent of the R MDs and 12 percent of the R DOs indicated the advantage of good facilities. Perhaps because high-quality facilities are more likely to be taken for granted in metropolitan areas, facilities were not commonly cited as advantages by metropolitan physicians (12 percent of the M Prs and 5 percent of the M Sps).

Overall, it appears that rural physicians find most satisfaction in the quality and continuity of physician-patient relationships, whereas metropolitan physicians (especially specialists) tend to emphahize the technical side of medicine as a major source of satisfaction.

Sources of dissatisfaction. About one-fifth of the metropolitan physicians and smaller proportions of the rural physicians (7 percent of the R MDs and 16 percent of the R DOs) stated that there were no disadvantages in their practices (table 3). Bureaucratic interference with practice, most often directed against government programs but including hospital administration and third-party payers, was the disadvantage most commonly cited by M Sps (43 percent), M Prs (25 percent), and R DOs (29 percent). Bureaucratic interference was also cited by 18 percent of the R MDs, but the disadvantage most frequently mentioned by them was the heavy workload involving long hours and many patients (30 percent). Heavy workload was cited by 16 percent of the R DOs, 14 percent of the M Prs, and 9 percent of the M Sps. Confining work situation (inability to get away from patients) was also a disadvantage reported by a substantial proportion of R MDs (20 percent), R DOs (13 percent), and M Prs (14 percent) but fewer M Sps (7 percent). Lack of facilities and support personnel was almost exclusively

Table 1. Satisfaction with work situation of rural medical doctors (R MDs), rural osteopaths (R DOs), metropolitan primary care physicians (M Prs), and metropolitan specialists (M Sps), by age groups, 1975

Satisfaction	63 R MDs		52 R DOs		51 M Prs		44 M Sps	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	All ages[1]							
Very satisfied	21	33.3	22	42.3	27	52.9	24	54.5
Satisfied	26	41.3	25	48.1	21	41.2	13	29.5
Neutral	14	22.2	3	5.8	2	3.9	5	11.4
Dissatisfied	1	1.6	2	3.8	1	2.0	2	4.5
Very dissatisfied	1	1.6						
	Under 55 years[2]							
Very satisfied	10	29.4	7	29.2	11	37.9	15	50.0
Satisfied	13	38.2	13	54.2	15	51.7	11	36.7
Neutral	9	26.5	2	8.3	2	6.9	2	6.7
Dissatisfied	1	2.9	2	8.3	1	3.4	2	6.7
Very dissatisfied	1	2.9						
	55 years and over[3]							
Very satisfied	11	37.9	15	53.6	16	72.7	9	64.3
Satisfied	13	44.8	12	42.9	6	27.3	2	14.3
Neutral	5	17.2	1	8.3			3	6.7
Dissatisfied								
Very dissatisfied								

[1] R MDs-R DOs: $\chi^2 = 63$, $df = 1$, level of significance = .426. R MDs-M Prs: $\chi^2 = 3.68$, $df = 1$, level of significance = .055. R MDs-M Sps: $\chi^2 = 3.95$, $df = 1$, level of significance = .047.

[2] R MDs-R DOs: $\chi^2 = .07$, $df = 1$, level of significance = .785. R MDs-M Prs: $\chi^2 = .20$, $df = 1$, level of significance = .655. R MDs-M Sps: $\chi^2 = 2.04$, $df = 1$, level of significance = .153.

[3] R MDs-R DOs: $\chi^2 = .84$, $df = 1$, level of significance = .358. R MDs-M Prs: $\chi^2 = 4.76$, $df = 1$, level of significance = .029. R MDs-M Sps: $\chi^2 = 1.68$, $df = 1$, level of significance = .194.

reported by rural physicians as a disadvantage (R MDs, 15 percent; R DOs, 20 percent; M Prs, none; M Sps, 2 percent). Lack of colleagues, specialists, or the disadvantage of solo practice was cited by 15 percent of the R MDs, 9 percent of the R DOs, 6 percent of the M Prs, and none of the M Sps.

Perception of personnel and facilities needed. The rural physicians were asked to indicate specific needs of their area. (The question was not asked of metropolitan physicians.) As shown in the following table, the perceived needs of the rural physicians, except for a need for more physicians, were generally quite modest.

	55 R MDs		*55 R DOs*	
Needs	*Number*	*Percent*	*Number*	*Percent*
Specialists	21	38.2	10	18.2
General and family practitioners	16	29.1	9	16.4
Recovery rooms, laboratories, and emergency rooms	15	27.3	9	16.4
Hospitals or additions to hospitals	11	20.0	9	16.4
Support personnel	8	14.5	5	9.1
Special equipment	3	5.4	11	20.0
Programs	3	5.4	0	0.0
Other	0	0.0	2	3.6
None	9	16.4	15	27.3
No response	8	...	1	...

Table 2. Satisfaction with work situation of rural medical doctors (R MDs), rural osteopaths (R DOs), metropolitan primary care physicians (M Prs), and metropolitan specialists (M Sps), listed in rank order, 1975

61 R MDs		*56 R DOs*		*51 M Prs*		*43 M Sps*	
Category	*Percent*	*Category*	*Percent*	*Category*	*Percent*	*Category*	*Percent*
Quality of doctor-patient relationship	43	Quality of doctor-patient relationship	52	Quality of doctor-patient relationship	39	Technical quality of medicine—doing good	49
Availability of good facilities	18	Technical quality of medicine—doing good	27	Technical quality of medicine—doing good	22	Challenge of medicine	21
Support staff	15	Rural quality of life[1]	18	Challenge of medicine	18	Quality of doctor-patient relationship	20
Autonomy, independence of practice	15	Specific type of practice	16	High-level medicine	18	Teaching opportunity	14
Technical quality of medicine—doing good	13	Autonomy, independence of practice	14	Specific type of practice	16	Specific type of practice	12
Rural quality of life[1]	13	Variety of work	13	Teaching opportunity	12	High-level medicine	9
Challenge of medicine	12	Availability of good facilities	13	Availability of good facilities	12	Variety of work	7
Financial, good income	12	Challenge of medicine	9	Financial, good income	12		
Variety of work	10			Support staff	10		
Other responses in 6 categories	35	Other responses in 4 categories	19	Other responses in 4 categories	22	Other responses in 7 categories	25

[1] Relaxed, no locked doors, easy travel.

The difference between rural and urban practice. The physicians were asked in an open-ended question to indicate the basic rural and urban practice distinctions. For rural physicians, the outstanding difference focused on the quality of physician-patient relationships—knowing the patient better, longer, and in the context of the social setting (table 4). Thirty-seven percent of the R MDs and 52 percent of the R DOs made this assessment. The quality of rural life was also mentioned as an advantage by about one-fourth of each type of rural physician.

Lack of facilities, equipment, and consultation together with long hours were regarded by some rural physicians as distinctive rural conditions. However, they were not as commonly cited as were positive qualities associated with patient relationships and rural life.

The metropolitan physicians tended to organize their responses to the same question differently. For the most part, frequently occurring answers conveyed perceptions of disadvantages of rural practice rather than advantages of urban practice. They emphasized lack of facilities and consultative services, professional isolation of rural physicians, and inappropriateness of rural areas as a place for specialty practice.

To summarize, when the rural physicians characterized the salient differences between urban and rural

Table 3. Major dissatisfaction with work situation of rural medical doctors (R MDs), rural osteopaths (R DOs), metropolitan primary care physicians (M Prs), and and metropolitan specialists (M Sps), listed in rank order, 1975

61 R MDs		*55 R DOs*		*49 M Prs*		*44 M Sps*	
Category	*Percent*	*Category*	*Percent*	*Category*	*Percent*	*Category*	*Percent*
Heavy workload; patients, hours	30	Bureaucratic interference	29	Bureaucratic interference	25	Bureaucratic interference	43
Confining work situation	20	Lack of facilities, staff	20	No disadvantage	20	No disadvantage	18
Bureaucratic interference	18	Undesirable patient, behavior[1]	16	Heavy workload; patients, hours	14	Legal problems	11
Lack of facilities, staff	15	Heavy workload; patients, hours	16	Confining work situation	14	Heavy workload; patients, hours	9
Lack of colleagues, specialists, solo disadvantage	15	No disadvantage	16	Undesirable patient behavior[1]	14	Conflict with colleagues, staff	9
Undesirable patient characteristics[2]	12	Confining work situation	13	Undesirable patient characteristics[2]	8	Undesirable patient behavior[1]	7
Undesirable patient behavior[1]	8	Lack of colleagues, specialists, solo disadvantage	9	Lack of colleagues, specialists, solo disadvantage	6	Confining work situation	7
No disadvantage	7						
Other responses in 7 categories	36	Other responses in 6 categories	21	Other responses in 8 categories	26	Other responses in 7 categories	18

[1] Break appointments, do not follow orders, do not appreciate, for example.
[2] Poor, elderly, neurotic, for example.

practice, they emphasized the quality of interaction between physician and patient within the community context. The metropolitan physicians, on the other hand, cited rural deficits in facilities, consultative services, and support personnel as the major differences. Thus, urban physicians tend to join other commentators in perceiving rural practice as a medical wasteland, a perception that rural physicians do not seem to share.

Reasons given for choosing an urban or rural practice. All respondents were asked why they established practices in rural or urban areas. As shown in table 5, for each type of physician, lifestyle was the reason most frequently given for rural or urban choice of practice

Table 4. Major perceptions of the difference between urban and rural practice by rural medical doctors (R MDs), rural osteopaths (R DOs), metropolitan primary care physicians (M Prs), and metropolitan specialists (M Sps), listed in rank order, 1975

62 R MDs		*56 R DOs*		*51 M Prs*		*44 M Sps*	
Category	*Percent*	*Category*	*Percent*	*Category*	*Percent*	*Category*	*Percent*
Quality of patient interaction (rural positive)	37	Quality of patient interaction (rural positive)	52	Lack of hospitals and facilities in rural	25	Specialty practice impossible in rural	19
Quality of rural life	24	Quality of rural life	23	Strain of rural practice	20	Lack of hospitals and facilities in rural	12
Lack of consultation, referral in rural	12	Autonomy, independence of practice in rural	12	Have consultants and doctor assistance in city	18	Isolation of rural doctor	12
Autonomy, independence of practice in rural	11	Variety of rural work	12	Lack of consultation, referral in rural	12	Don't know, have not been in rural area	10
Lack of hospitals and facilities in rural	11	No free time, long hours, demands in rural	7	Isolation of rural doctor	12	Good hospitals, laboratories in city	10
Advantage of rural system of care	8	Lack of consultation, referral	5	Good hospitals, laboratories in city	12	Have consultants and doctor assistance in city	10
No free time, long hours, demand in rural	6	Fees lower in rural area	5	No free time, long hours, demands in rural	10	Quality of patient interaction (rural positive)	10
		City life unattractive	5	Rural care inadequate	10	Rural life unattractive	7
		Don't know, have not been in urban area	5				
Other responses in 11 categories	29	Other responses in 12 categories	27	Other responses in 11 categories	39	Other responses in 13 categories	38

(R MDs, 50 percent; R DOs, 48 percent; M Prs, 57 percent; M Sps, 44 percent). Many of the rural physicians had been reared in small towns, and they elected either their hometown or another town of similar size as a practice site. For some, rural choices resulted from strong negative feelings about city life. The metropolitan physicians expressed preferences for an urban lifestyle (also rooted in their early experiences) in proportions similar to those of rural physicians. Thus, among the reasons for choice of location, socialization during youth which produced a preferred lifestyle was an important consideration.

The type of practice preferred was the second most frequent reason given for choice of practice location for each type of physician (R MDs, 25 percent; R DOs, 29 percent; M Prs, 20 percent; M Sps, 35 percent). For rural physicians this reason was often expressed in terms of wanting to practice family or general medicine; some saw themselves in the image of the "country doctor," and some had a negative perception of urban practice. On the other hand, the desire to specialize, avoidance of professional isolation, and better facilities were reasons that led to urban locations.

Thus, 75 percent or more of each group of physicians' choice of practice location was based either on lifestyle preferences or type of practice preferences. The remaining reasons were divided among choosing a practice site close to the place of medical education; a practice opportunity such as practice available to buy or an invitation to join a group; and constraints such as limited finances, limited opportunities (for example, among foreign physicians), location of spouse's place of employment, and substitution for military service.

From these responses, one is impressed with the influence of socialization during youth and the preference for type of practice (general and family versus specialization) as mediating the choice of location and the relative insignificance of such immediate contingencies as specific opportunities or situational constraints as the underlying basis for decisions regarding rural and urban practice.

Perceptions of the community as a place to live. It is difficult, if not impossible, to separate physicians' perceptions of professional activities from their perceptions of the community as a place to live. The vast majority of each type of physician expressed being satisfied or very satisfied with their community as a place to live (R MDs, 94 percent; R DOs, 89 percent; M Prs, 98 percent; M Sps, 95 percent). A higher proportion of metropolitan than rural physicians reported being very satisfied. However, it appears that very few physicians were living in community situations which they found disagreeable (table 6).

Advantages and disadvantages of the community as a place to live. The advantages of the physicians' communities were elicited in an open-ended question followed by a similar question about disadvantages. The advantage most commonly reported by rural physicians was their general liking for rural areas, and they often cited their rural background as the basis for the preference; for example, "I was born and reared in a small town and I wouldn't live anyplace else." More than half of the R MDs (52 percent) and R DOs (64 percent) gave responses of this type. The metropolitan physicians gave responses that could be classified as "pro-city" in proportions as great or greater than those of the rural physicians (M Prs, 64 percent; M Sps, 61 percent). The general tone of the responses was that they would consider no other setting (table 7).

In responses identifying more specific rural and urban

Table 5. Summary of reasons for an urban or rural choice of location by rural medical doctors (R MDs), rural osteopaths (R DOs), metropolitan primary care physicians (M Prs), and metropolitan specialists (M Sps), 1975

Reason	60 R MDs		56 R DOs		51 M Prs		43 M Sps	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Antecedent influences:								
Preferred lifestyle, hometown	30	50.0	27	48.2	29	56.9	19	44.2
Character of practice preferred	15	25.0	16	28.6	10	19.6	15	34.9
Training-related influences:								
Area of medical education	2	3.3	.....		4	7.8	4	9.3
Post-training influences:								
Opportunity	7	11.7	9	16.1	7	13.7	3	7.0
Constraints	6	10.0	4	7.1	1	2.0	2	4.6

characteristics, 19 percent of the R MDs and 20 percent of the R DOs mentioned the crime-free qualities of their communities. On the other hand, some metropolitan physicians (M Prs, 12 percent; M Sps, 20 percent) mentioned the special qualities of the particular metropolitan area; for example, that it was not too large and had the qualities of a small town. Although somewhat more commonly mentioned by rural physicians, qualities of the people were considered an advantage by a substantial proportion of each group (R MDs, 44 percent; R DOs, 34 percent; M Prs, 25 percent; M Sps, 27 percent).

The advantages of schools, churches, and other services were indicated as often by rural as by metropolitan physicians (R MDs, 30 percent; R DOs, 21 percent; M Prs, 23 percent; M Sps, 20 percent). Another advantage mentioned by rural and urban physicians was that both rural and urban areas were accessible (R MDs, 16 percent; R DOs, 5 percent; M Prs, 15 percent; M Sps, 18 percent).

To summarize, the most common advantage of the community as a place to live was a general preference for either rural or metropolitan settings. This statement may seem quite general and perhaps vague, but it is not trivial—it fits well into what is known about the background of rural and metropolitan physicians; that is, rural physicians are likely to be reared in rural communities and metropolitan physicians in metropolitan areas. Thus, the socialization during youth carries forward significantly to community preferences during adulthood. The general and pervasive nature of the advantages of the area extends to the large number of physicians who referred to the general qualities of the people in their respective communities, to the friendly and personal social interactions, and to the advantages for children and spouses.

A substantial number of physicians reported that their communities had no disadvantages as places to live (R MDs, 14 percent; R DOs, 20 percent; M Prs, 29 percent; M Sps, 20 percent). In contrast to the advantages cited, the disadvantages reported tended to be more specific (table 7). Some metropolitan physicians regarded the community as too large, and some rural physicians cited problems in social interaction and lack of privacy; however, lack of services and specific or situational problems, or both, were more commonly mentioned. Lack of cultural activities ranked highest among the disadvantages cited by rural physicians (R MDs, 52 percent; R DOs, 50 percent). Although it is a subjective impresssion, the lack of cultural activities

Table 6. Satisfaction with the community as a place to live of rural medical doctors (R MDs), rural osteopaths (R DOs), metropolitan primary care physicians (M Prs), and metropolitan specialists (M Sps), by age groups, 1975

Satisfaction with community	R MDs		R DOs		M Prs		M Sps	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
	All ages[1]							
Very satisfied	26	41.3	32	59.3	38	74.5	28	63.6
Generally satisfied	33	52.4	16	29.6	12	23.5	14	31.8
Not satisfied or dissatisfied	3	4.8	5	9.3	.....		2	4.5
Generally dissatisfied	1	1.6	1	1.9	1	2.0	.....	
	Under 55 years[2]							
Very satisfied	15	44.1	13	52.0	21	72.4	17	56.7
Generally satisfied	18	52.9	8	32.0	8	27.6	12	40.0
Not satisfied or dissatisfied	1	2.9	3	12.0	.....		1	3.3
Generally dissatisfied	.....		1	4.0	.....		.....	
	55 years and over[3]							
Very satisfied	11	37.9	19	65.5	17	77.3	11	78.6
Generally satisfied	15	51.7	8	27.6	4	18.2	2	14.3
Not satisfied or dissatisfied	2	6.9	2	6.9	.....		1	7.1
Generally dissatisfied	1	3.4	.....		1	4.5	.....	

[1] R MDs-R DOs: $\chi^2 = 3.08$, $df = 1$, level of significance = .79. R MDs-M Prs: $\chi^2 = 11.33$, $df = 1$, level of significance = .001. R MDs-M Sps: $\chi^2 = 4.33$, $df = 1$, level of significance = .029.

[2] R MDs-R DOs: $\chi^2 = .11$, $df = 1$, level of significance = .737. R MDs-M Prs: $\chi^2 = 4.03$, $df = 1$, level of significance = .45. R MDs-M Sps: $\chi^2 = .56$, $df = 1$, level of significance = .452.

[3] R MDs-R DOs: $\chi^2 = 3.38$, $df = 1$, level of significance = .066. R MDs-M Prs: $\chi^2 = 6.31$, $df = 1$, level of significance = .12. R MDs-M Sps: $\chi^2 = 4.72$, $df = 1$, level of significance = .029.

appeared to be a cliche among rural physicians—for many it did not present a serious disadvantage. It is interesting that "too far from recreation" was cited almost exclusively by metropolitan physicians (M Prs, 8 percent; M Sps, 18 percent); the complaint was often that activities such as skiing and water sports were inaccessible. Inadequate schools were not exclusively a rural problem (R MDs, 14 percent; R DOs, 11 percent; M Prs, 4 percent; M Sps, 18 percent). Economic, social, and political problems cited by metropolitan physicians (the largest category for them) reflect perceived conditions of poverty, crime, and race relations. (R MDs, 5 percent; R DOs, 11 percent; M Prs, 33 percent; M Sps, 18 percent).

Intent to remain in current location. The vast majority of both rural and metropolitan physicians said that they were "almost sure to stay" or "probably would stay" in their current locations (R MDs, 87 percent; R DOs, 84 percent; M Prs, 90 percent; M Sps, 98

Table 7. Advantages and disadvantages of current location as a place to live cited by rural medical doctors (R MDs), rural osteopaths (R DOs), metropolitan primary care physicians (M Prs), and metropolitan specialists (M Sps), 1975

	R MDs		R DOs		M Prs		M Sps	
Response	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*
Advantages								
Pro country and rural	33	52.4	36	64.3	1	1.9	.....	
Pro city	.....		.....		33	63.5	27	61.4
Anti city	10	15.9	6	10.7	.....		1	2.3
Safety, crime free	12	19.0	11	19.6	1	1.9	1	2.3
Special nature of Kansas City	.....		.....		6	11.5	9	20.5
People in general	28	44.4	19	33.9	13	25.0	12	27.3
Friendly personal social interaction	6	9.5	6	10.7	4	7.7	1	2.3
Good area for children and spouse	6	9.5	7	12.5	1	1.9	4	9.1
Good school or churches, or both	19	30.2	12	21.4	12	23.1	9	20.5
Accessibility, proximity of services	10	15.9	3	5.4	8	15.4	8	18.2
Both urban and rural areas accessible	6	9.5	3	5.4	7	13.5	5	11.4
Favorable climate and geography	3	4.8	3	5.4	12	23.1	6	13.6
Favorable ecology	1	1.6	3	5.4	3	5.8	7	15.9
Home area	.....		2	3.6	3	5.8	.....	
Practice advantages	11	17.5	6	10.7	4	7.7	4	9.1
None	2	3.2	3	5.4	.....		1	2.3
Disadvantages								
Area too large	.....		.....		7	13.5	2	4.5
Lack of privacy	8	12.7	4	7.2	.....		1	2.3
People and social interaction problems	11	17.5	6	10.8	.....		3	6.8
Economic, social, and political problems	3	4.8	6	10.8	17	32.7	8	18.2
Too far away from cultural activities	33	52.4	28	50.1	2	3.8	1	2.3
Too far away from recreation	1	1.6	.....		4	7.7	8	18.2
Schools inadequate	9	14.3	6	10.8	2	3.8	8	18.2
Community, transportation service inadequate	10	15.8	4	7.2	3	5.8	3	6.8
Too far away from relatives	.....		.....		.....		1	2.3
Professional problems	8	12.7	9	16.1	1	1.9	1	2.3
Climate	1	1.6	.....		5	9.6	2	4.5
Specific or personal dissatisfaction	.....		.....		3	5.8	3	6.8
None	9	14.3	11	19.6	15	28.8	9	20.5

percent). Age seemed to intensify this resolve, as shown in table 8.

The rural physicians were asked if they would consider moving to larger or smaller places if their incomes remained the same. Only 10 percent of the R MDs and 4 percent of the R DOs said that they might consider a move to a large metropolitan area such as Kansas City or St. Louis. However, more of the physicians indicated less reluctance to move to a medium size city of about 100,000 population, such as Springfield or St. Joseph, or to a place about half the size of their current one, as shown in the following table.

Consider moving to—	*R MDs*		*R DOs*	
	Number	*Percent*	*Number*	*Percent*
Large city:				
Yes	6	9.5	2	3.6
No	57	90.5	54	96.4
Medium size city:				
Yes	17	27.0	8	14.3
No	46	73.0	48	85.7
Place half size of current one:				
Yes	19	30.6	9	16.1
No	43	69.4	47	83.9

The metropolitan physicians were asked if they would consider moving to smaller places, assuming equal income. More than half said they would consider moving to a medium size city such as Springfield or St. Joseph. However, they were more reluctant to consider a place of less than 10,000 population, as the following table shows.

Consider moving to—	*M Prs*		*M Sps*	
	Number	*Percent*	*Number*	*Percent*
Medium size city:				
Yes	28	54.9	26	59.1
No	23	45.1	18	40.9
Place 10,000 or less:				
Yes	10	19.6	13	30.2
No	41	80.4	30	69.8

Summary and Discussion

Our inquiry revolved around the question of physicians' perceptions of rural and metropolitan areas as places to practice and live. The image of rural areas as medical wastelands and socially and culturally disadvantaged places to live does not correspond well with the perceptions of physicians who practiced in a 20-county rural area of Missouri in 1975. However, that image

Table 8. Probability of remaining in current location of rural medical doctors (R MDs), rural osteopaths (R DOs), metropolitan primary care physicians (M Prs), and metropolitan specialists (M Sps), by age groups, 1975

Probability of staying	*62 R MDs*		*55 R DOs*		*52 M Prs*		*44 M Sps*	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*
				All ages[1]				
Almost sure to stay	40	64.5	33	60.0	40	76.9	35	79.5
Probably will stay	14	22.6	13	23.6	7	13.5	8	18.2
Uncertain	5	8.1	5	9.1	2	3.8	.....	
Likely to move	.....		1	1.8	3	5.8	1	2.3
Certain to move	3	4.8	3	5.5	.....			
				Under 55 years[2]				
Almost sure to stay	16	48.5	9	36.0	19	63.3	21	70.0
Probably will stay	12	36.4	11	44.0	7	23.3	8	26.7
Uncertain	3	9.1	2	8.0	2	6.7	.....	
Likely to move	.....		1	4.0	2	6.7	1	3.3
Certain to move	2	6.1	2	8.0	.....			
				55 years and over[3]				
Almost sure to stay	24	82.8	24	80.0	21	95.5	14	100.0
Probably will stay	2	6.9	2	6.7	.....			
Uncertain	2	6.9	3	10.0	.....			
Likely to move	.....				1	4.5	.....	
Certain to move	1	3.4	1	3.3	.....			

[1] R MDs-R DOs: $\chi^2 = .09$, $df = 1$, level of significance = .755. R MDs-M Prs: $\chi^2 = 1.53$, $df = 1$, level of significance = .216. R MDs-M Sps: $\chi^2 = 2.13$, $df = 1$, level of significance = .144.

[2] R MDs-R DOs: $\chi^2 = .47$, $df = 1$, level of significance = .494. R MDs-M Prs: $\chi^2 = .87$, $df = 1$, level of significance = .352. R MDs-M Sps: $\chi^2 = 2.18$, $df = 1$, level of significance = .139.

[3] R MDs-R DOs: $\chi^2 = .01$, $df = 1$, level of significance = .950. R MDs-M Prs: too few cases for χ^2 test, R MDs-M Sps: too few cases for χ^2 test.

comes closer to the perceptions of physicians practicing in a nearby metropolitan area.

The majority of all the physicians interviewed, rural and metropolitan, were satisfied with their practice locations, although the proportion of rural medical doctors was somewhat lower. The satisfaction of the rural physicians and to some extent the metropolitan primary care physicians tended to center on patient relationships that enmeshed them in community relationships. For metropolitan physicians, particularly specialists, satisfaction centered on technical performance in sophisticated medical settings.

The rural medical doctors were most frequently dissatisfied with situations emanating from heavy workloads and confining work situations, whereas metropolitan physicians were most frequently dissatisfied with bureaucratic constraints on the practice of medicine. Lack of colleagues, facilities, and support personnel were more commonly cited by rural medical doctors than by metropolitan physicians, but compared with other disadvantages, these factors were mentioned relatively infrequently. Rural osteopaths, in a manner similar to that of the metropolitan physicians, most often cited bureaucratic constraints as a disadvantage; they were more likely than rural medical doctors to report lack of facilities, but less likely to cite heavy workloads, confining work situations, and lack of colleagues as disadvantages.

Concerning specific needs of their area, rural physicians most often mentioned additional physicians. Most commonly, they mentioned a need for more specialists—typically, general surgeons—but this was closely followed by a need for additional general practitioners or family physicians. To a lesser extent, additional or expanded hospitals and other facilities were also cited.

Quite consistent with the perceived advantages of practice, the rural physicians emphasized the quality of physician-patient relationships, which extended to the ambience of rural life and the autonomy of rural practice, as an advantage over urban practice. Conversely, the metropolitan physicians emphasized isolation of rural physicians and lack of facilities in rural areas.

The choice of rural or metropolitan practice appears to be rooted in preference of lifestyle and for type of practice. The physicians interviewed tended not to base their choice of rural or metropolitan sites on immediate opportunities or constraints, a tendency that may reflect the relatively great opportunities physicians have for choice of location from the standpoint of demand or economics.

The physicians in each category were generally very satisfied with their communities as places to live. As with the practice preference itself, much of the preference for a community appeared to stem from the physicians' socialization during early years. Many of the rural physicians saw congestion and social problems (crime, poverty, race relations) as deterrents to living in a city, whereas the metropolitan physicians generally expressed pro-urban sentiments. In any event, few of the physicians interviewed expressed much interest in moving to places that were appreciably different in size from their current locations. On the whole, they did not appear to be living in communities that they rated negatively as places to live.

Negative perceptions of rural practice and communities by urban physicians tended not to be shared by rural physicians. However, it must be acknowledged that choice of practice sites is weighted heavily toward urban areas, and those physicians who found rural practice undesirable may have initially chosen a metropolitan site or expressed dissatisfaction with the rural practice by moving to an urban location. Nevertheless, in efforts to recruit physicians for rural areas, the results of this study may have some positive effect. Moreover, the current higher value being placed on rural life by the general population—as indicated by migration from metropolitan areas—may carry over to the choice of location by physicians.

References

1. Cordes, S. M.: Distribution of physician manpower. *In* Rural health services organization, delivery, and use, edited by E. W. Hassinger and L. R. Whiting. Iowa State University Press, Ames, 1976, pp. 56–80.
2. U.S. Department of Health, Education, and Welfare: Health, United States, 1975. DHEW Publication No. (HRA) 76–1232. U.S. Government Printing Office, Washington, D.C. 1976, p. 118.
3. Bible, B. L.: Physician's views of medical practice in nonmetropolitan communities. Professional and social aspects. Public Health Rep 85: 11–17, January 1970.
4. Parker, R. C., and Sorensen, A.: The tides of rural physicians: the ebb and flow, or why physicians move out of and into small communities. Med Care 26: 152–166 (1978).
5. Phillips, M. L., Marby, J. H., and Houston, C. S.: Eager communities and reluctant doctors. N Engl J Med 278: 1263–1268 (1968).
6. Cooper, J. K., Heald, K., and Samuels, M.: The decision for rural practice. J Med Educ 47: 938–944 (1972).
7. Crawford, R. L., and McCormack, R. C.: Reasons physicians leave primary practice. J Med Educ 46: 263–269 (1971).
8. Parker, R. C., and Tuxill, T. G.: The attitude of physicians toward the small community. J Med Educ 42: 327–344 (1967).
9. Roemer, M. I.: Approaches to the rural doctor shortage. Rural Sociol 16: 137–147 (1951).
10. Hassinger, E. W., Hastings, D. V., and McNamara, R. L.: Changes in number and location of health practitioners in a 20-county rural area of Missouri. Public Health Rep 90: 313–318, July-August 1975.